Series PF, PowerFin™

Up to 25Amp • 120/240, 380, 480 Vac • AC Output

- **Ultra High Steady State Current Rating**
- **Low Leakage (Off-State)**
- **SCR Output**
- **AC or DC Control**
- **Crydom's Patented Design**

Crydom's PowerFin™ series delivers the highest ratings of any single in-line package (SIP). The integral heat sink design can operate at 25 amps RMS in forced air at 85°C case temp. With natural convection in free air, it rates 10 amps RMS at 25°C ambient.

Built-in advantages include Surface Mount Technology and SCR output. Manufactured in Crydom's ISO 9002 Certified facility for optimum product performance and reliability.

MODEL NUMBERS				
AC CONTROL	(120Vac)	**PF240A25**		
	(24Vac)	**PFE240A25**		
DC CONTROL	(5Vdc)	**PF240D25**	**PF380D25**	**PF480D25**
	(24Vdc)	**PFE240D25**	**PFE380D25**	**PFE480D25**

OUTPUT SPECIFICATIONS ①

Operating Voltage (47-63 Hz) [Vrms]	12-280	48-530	48-660
Load Current Range [Arms]	Forced Air.06-25 ③ Convection Air .06-10		
Transient Overvoltage [Vpk]	600	1200	1200
Max. Surge Current, (16.6ms) [Apk]	250	250	250
Max. On-State Voltage Drop @Rated Current [Vpk]	1.6	1.6	1.6
Maximum I^2t for Fusing, (8.3 msec.) [A^2sec]	260	260	260
Max. Off-State Leakage Current @Rated Voltage [mArms]	0.1	0.1	0.1
Min. Off-State dv/dt @Max. Rated Voltage [V/µsec] ②	500	500	500
Max. Turn-On Time ④	1/2 Cycle (DC Control), 10.0 msec (AC Control)		
Max. Turn-Off Time	1/2 Cycle (DC Control), 40.0 msec (AC Control)		
Power Factor (Min.) with Max. Load	0.5	0.5	0.5

INPUT SPECIFICATIONS ①

	DC CONTROL			AC CONTROL	
Nominal Voltage	5Vdc	5Vdc	24Vdc	120Vac	24Vac
MODEL NUMBERS	**PF240D25**	**PF380D25** **PF480D25**	**PFE240D25** **PFE380D25** **PFE480D25**	**PF240A25**	**PFE240A25**
Control Voltage Range	3-15 Vdc	4-15 Vdc	15-32 Vdc	90-140 Vrms	18-36 Vrms
Max. Turn-On Voltage	3.0 Vdc	4.0 Vdc	15.0 Vdc	90.0 Vrms	18.0 Vrms
Min. Turn-Off Voltage	1.0 Vdc	1.0 Vdc	1.0 Vdc	10.0 Vrms	2.0 Vrms
Nominal Input Impedance	300 Ohm	240 Ohm	1500 Ohm	14.1k Ohm	4.2k Ohm
Typical Input Current @Nominal Voltage	15 mAdc	15 mAdc	15 mAdc	10 mArms	5 mArms

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GENERAL NOTES

① All parameters at 25ºC unless otherwise specified.
② Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
③ Heatsink temperature 85°C Maximum.
④ Turn-On Time for Random Turn-On versions 0.1msec (DC Control Models).

For recommended applications and more information contact:
USA: (800) 8 CRYDOM • (800) 827-9366 • (619) 715-7200 • fax (619) 715-7280
Crydom Corp, 9525 Chesapeake Drive, San Diego, CA 92123 • e-mail: sales@crydom.com
WEB SITE: http://www.crydom.com **FASTFAX Product Information:** (888) 267-9191
UK: (44)1202 812300 • fax (44)1202 812340 Crydom International Ltd., 85, Condor Close, Woolsbridge Industrial Estate, Three-Legged Cross. Wimborne, Dorset, England BH21 6SU
GERMANY: (49) (0)6874 182580 • fax (49)(0)6874 182585 Crydom GmbH, Gewerbegebiet Im Schachen, D-66687 Nunkirchen, Germany • e-mail: vertrieb@crydom.com

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Series PF, PowerFin™

Up to 25Amp • 120/240, 380, 480 Vac • AC Output

CRYDOM
Control over power

GENERAL SPECIFICATIONS

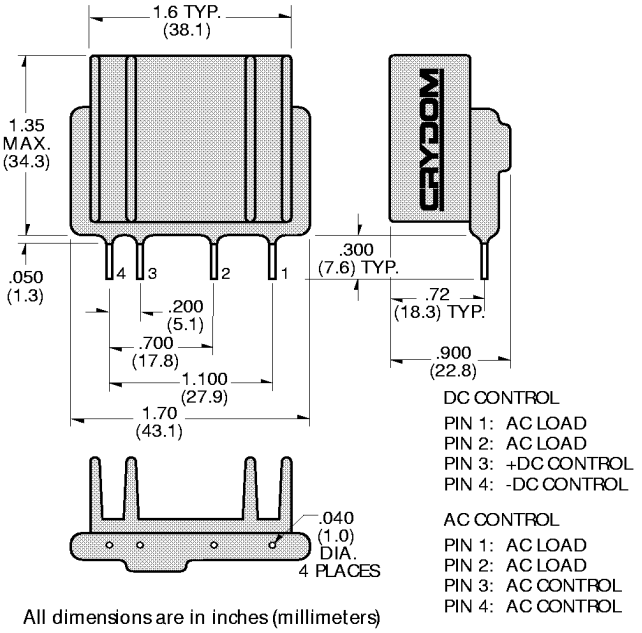
Dielectric Strength 50/60Hz Input/Output	4000 Vrms
Insulation Resistance (Min.) @500 Vdc	10^9 Ohm
Max. Capacitance Input/Output	8 pF
Ambient Operating Temperature Range	-30 to 80ºC
Ambient Storage Temperature Range	-30 to 125ºC

MECHANICAL SPECIFICATIONS

Weight: (typical)	.85 oz. (25g)
Encapsulation:	Thermally Conductive Epoxy

AVAILABLE OPTIONS

R Random Turn-On (AC & DC Control, 240V Only)
Phase Controllable (DC Control, 240V Only)
Example: **PF240A25R, PFE240D25R**



All dimensions are in inches (millimeters)

CURRENT DERATING CURVES

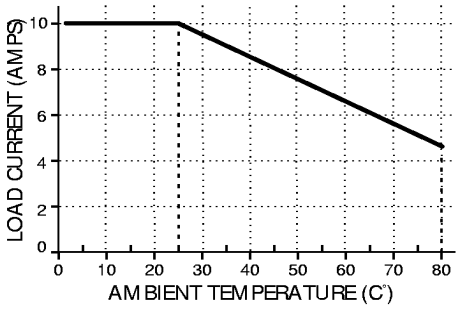


Fig.1 Convection Cooling

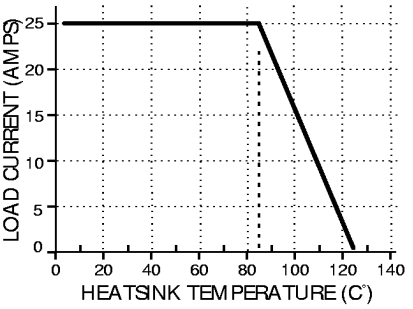


Fig.2 Forced Air Cooling

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APPROVALS

UL E116950 CE
VDE 70938 (DC Control Only)

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